

Watson Names:



General Chemistry 1.4

Penny Density Mystery

Worksheet

Period: _____ Table: _____

My Dear Watsons,

We have a mystery to solve. The US Mint has changed the formulation of the Penny several times during its years of minting. We have been hired to find-out when they changed the formulation. Use all that you know about density to determine when the formulations may have been changed. You have been given **12*** pennies of various dates from my **personal collection****, plus a scale and callipers to solve the mystery. Submit your conclusion below by the end of class.

Good Luck,

Sherlock Holmes

aka Mr. Aff

Rubric:

3 Units [3]

12 Densities [12]

Mystery Solved!

1 year range [5]

2 year range [4]

3 year range [3]

4 year range [2]

5 year range [1]

<u>Penny Description</u> Date, Shiny, etc.	<u>Mass</u>	<u>Volume</u>	<u>Density</u>
Units Chosen >>>	()	()	()

Conclusion:

From our analysis the US Mint changed the formulation between _____ and _____.

* You may request an additional lot of 5 pennies to further refine your conclusion.

** All pennies will be checked at the end of the class.

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